CHAPTER 7

Supply Company

CONTENTS

ORGANIZATION AND MISSION

The supply company supports the arming system through its class V operations, the fueling system through class III operations, and the manning task through provision of rations, clothing, and individual equipment. Specifically, the company provides receipt, storage, and issue of class I, II, III, IV, and VII items. It also conducts class V transloading operations at its ammunition transfer point and operates a salvage point. The company is organized as shown in Figure 7-1. The company consists of a company headquarters and a supply platoon.

The company performs the following functions:

- Receive and issue class I, II, packaged III, IV (limited), and VII supplies, as well as unclassified maps. It also provides limited storage for these items. ASL stocks are stored by the MSB supply and service company. The company does not receive, store, or issue classified maps, aircraft, airdrop equipment, COMSEC, or construction materiel.
- Receive, store, and issue bulk petroleum using organic fuel transporters.
- Transload class V supplies from corps transportation assets to unit vehicles.
- Operate a salvage point for all supplies except COMSEC supplies, toxic agents, aircraft, ammunition, explosives, and medical items.
- Provide unit maintenance for organic vehicles and equipment as well as those of the HHD.

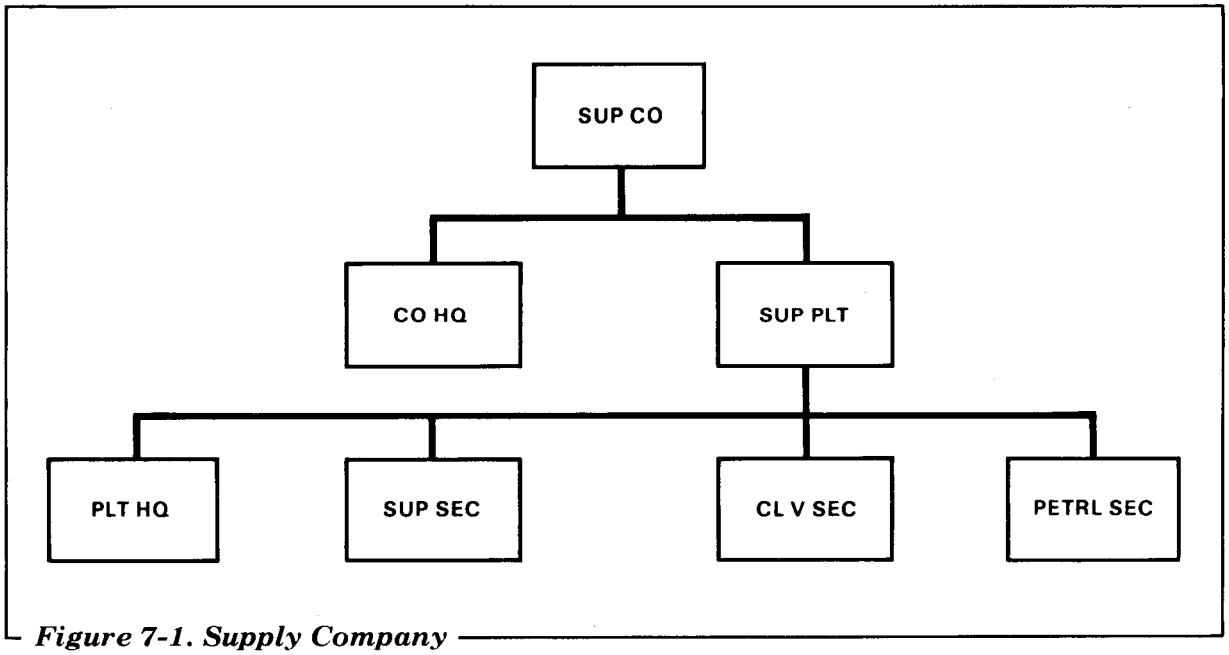


Figure 7-1. Supply Company

PRINCIPLES

The FSB must be 100 percent mobile with organic equipment. To enhance mobility, the quantity and variety of supplies the supply company can have on hand at any given time are limited. As a result, the supply company and its supporting supply activities put a number of supply principles to work to cut down on the response time between initial request and subsequent issue to the brigade.

PUSH SYSTEM

A push system is the initial go-to-war supply system in an undeveloped theater. Preplanned packages of selected supplies are sent forward to replenish expended supplies in anticipation of requirements of supported units. Initial quantities are based on strength data and historical demand. When the theater stabilizes, the supply system becomes a push system to the BSA for critical supplies based on personnel strengths and forecasted requirements. Other supplies are provided through a pull system based on actual demand. Supplies may still be pushed at the battalion and brigade level, especially during high intensity combat operations to heavily engaged units. Such units may be unable to ask for supplies because of gaps in the chain of command or intensive jamming on a fluid battlefield. Supplies may also be pushed to support a deep operation.

THROUGHPUT DISTRIBUTION

Throughput distribution bypasses one or more echelons in the supply system to minimize handling and speed delivery forward. Supplies are often throughput to the FSB from the corps and, in the case of class IV barrier materials and some class VII major end items, may be throughput directly to the user in the forward area. When most of the load is for a specific unit, the transporter may deliver directly to the requesting unit.

SUPPLY POINT AND UNIT DISTRIBUTION

In an effort to tailor supply distribution, the supply company uses a combination of

supply point distribution and unit distribution to support the brigade. When supply point distribution is used, unit representatives come to the supply points in the BSA to pick up their supplies. Maneuver battalion task forces with field trains in the BSA have their organic unit supply, fuel, and ammunition trucks assemble in the field trains along with repaired equipment, personnel replacements, and other assets. There they form a LOGPAC which goes forward to provide support to forward deployed elements. (LOGPAC operations are detailed in FM 71-2.) The supply company tries to cut down on the distances the forward units must travel by positioning supplies as far forward as possible. In order to provide a quick turnaround for forward units, the supply company also staggers the unit pickup times and sets up to provide a smooth traffic flow through the supply areas.

Due to limited transportation assets in the FSB, supply point distribution is normal for most classes of supply. Unit distribution by corps assets is used to deliver barrier materials to emplacement sites. Other classes of supply may be delivered using unit distribution when the tactical situation permits and transportation assets are available. One example is the forward refueling technique described later in this chapter. Emergency resupply using unit distribution may be accomplished via motor or air transport. Aerial resupply is discussed later in this chapter.

CAPTURED AND FOUND SUPPLIES

Another way to speed supplies to users is to take advantage of captured and found materiel. Fuels can be used as soon as they have been tested. (Note: Two pieces of equipment have been developed to enhance capability to use captured fuel. A captured fuels test kit in a single plastic housing can be used to determine fuel usability. A lightweight, quickly deployable electric pump has been designed to accompany tactical vehicles.) Barrier and construction materials can be used immediately. Captured subsistence can be used to feed EPWs and civilian populations after it has been inspected by veterinary personnel and declared fit for consumption. Found US subsistence may be consumed by US troops after veterinary approval. Captured and found medical supplies may be used to treat EPWs and civilians.

Captured vehicles and equipment are normally reported through intelligence channels and turned in to maintenance collection points. Other equipment may be turned in to the salvage point. There it is identified, classified, and reported through the FSB S2/S3 to the DMMC. The S2/S3 will provide disposition instructions on the basis of DMMC guidance.

Other specific considerations for all units in the brigade include:

- Reporting all enemy materiel captured or found through intelligence channels.
- Considering all enemy materiel booby-trapped. Access to materiel should be limited until the area is determined to be clear.
- Reporting toxic agents to NBC elements in the S2/S3 section.
- Reporting medical materiel to the supporting medical element.
- Having explosives examined by EOD personnel.

SECTION FUNCTIONS

COMPANY HEADQUARTERS

The company headquarters maintains command and control over the supply company. Headquarters personnel provide unit-level administrative and supply support, NBC operations training and assistance to the company, and graves registration training to the brigade elements. Unit supply operations are discussed in FM 10-14, and unit-level GRREG information is provided in FM 10-63-1.

Maintenance personnel in the company headquarters provide vehicle recovery and unit maintenance for all vehicles and equipment organic to the FSB HHD and to the supply company, except communications-electronics equipment. Unit maintenance operations are described in FM 43-5.

SUPPLY PLATOON

The supply platoon consists of a platoon headquarters, a supply section, a class V section, and a petroleum section. Headquarters personnel supervise, direct, and coordinate platoon operations. The TACCS device to run SARSS-1 is located in this platoon, headquarters.

The supply section provides class I, II, III (packaged), IV, and VII and unclassified map supply support. It maintains prescribed reserves of supplies and equipment for the brigade and operates a salvage collection point for designated supplies. The class V section operates one ATP in the BSA to transload class V supplies from corps transportation to supported unit vehicles. The petroleum section provides bulk class III to all division units and designated nondivisional units in the brigade area.

When augmented, the MSB S&S company may provide graves registration and CEB support to the brigade elements. If these elements are employed in the brigade area, they may be attached to or colocated with the FSB supply platoon. When necessary, the MSB S&S company may also attach water equipment and personnel to the FSB supply company.

SUPPLY OPERATIONS

PLANNING

The supply company commander along with the support operations section must anticipate supply requirements throughout the brigade area and manage limited resources to provide support as responsively as possible. Requirements are based on—

- Tactical plans.
- Environment and terrain.
- Demand data and previous experience.
- Troop strength.
- Equipment densities.
- Time and distance factors.

Supply planners track the tactical situation as well as casualties and equipment destroyed or in repair. This allows them to take necessary actions (such as requesting additional transportation or critical supplies) without having to wait for unit requests. It also enables them to reorganize supply elements or to request backup support to meet the most critical requirements. This may involve shifting assets from one supply point to another (for example, from the class 11/111 (packaged) /IV/VII point to the ATP) to meet surge requirements or receiving assets from the MSB, the COSCOM, or another FSB to overcome critical shortfalls.

Planners must also coordinate with the DMMC to ensure all necessary steps have been taken to supply items which are used either sparingly or not at all during peacetime. The division chemical officer will provide planning assistance through G4 channels for chemical items. Items to consider include—

- Chemical filters.
- Human remains pouches and other GRREG supplies.
- Cargo sling sets.
- Batteries.
- MOPP gear.
- Class VI.
- Wire.
- Fog oil.
- Chemical decontaminants.

Procedures must also be worked out for command-regulated items. Expensive, highly technical, or scarce items are often designated in the OPORD as command regulated. Command approval is required before these items can be issued. However, this does not necessarily mean commanders must approve each individual request. Division commanders may authorize the DMMC to release items on the basis of support priorities specified in the OPORD. The commander may place additional limitations on issue of items if he desires. This will often include setting quantities of critical items authorized to be issued to each unit in accordance with the support priorities. If requests from a unit exceed its authorized quantity, the unit would have to go through command channels to get its authorization changed. In any case, the support operations section and supply company should ensure procedures are established in advance.

Planners must also consider supply element layouts within the context of the FSB S2/S3 plan as discussed in Chapter 5. The supply company is located in the BSA near land lines of communication. The supply platoon's sections normally operate at separate sites near the MSR. To provide continuous command and control and liaison with the FSB commander, the company headquarters is set up at the edge of the company area closest to the FSB CP.

The supply platoon headquarters is established in an area central to the supply sections. Section sites should be reasonably close to the MSR, accessible to supported units and resupply vehicles. Each site should be large enough to disperse operations, yet not so large that internal security becomes a problem. The sites should have good roads, an adequate number of areas with level ground and good drainage, and, when possible, the natural potential to provide cover and concealment.

Positioning considerations are listed in Chapter 5. Others include the following:

- The salvage point should be set up near the MSR to minimize the distance supported units must drive trucks being used for backhaul.
- The sites for the class III section and the ATP must not be next to one another in order to prevent a fire or explosion from destroying both sites.
- The site for the class III section should not have any low-lying areas where fumes could collect. It also should be far enough away from the other sections to prevent contamination of supplies in the event of a fuel spill.

Layout plans should show receipt, storage, and issue areas for each section; entrance and exit control points; traffic patterns and

customer parking areas; areas where man-made camouflage will be used; communications equipment and wires; and fighting positions.

CLASS I

Class I supply operations are kept as simple as possible because the supply section must be able to move quickly. There is little equipment, limited stockage, and only a little paperwork. When possible, receipt, ration breakdown, and issue are combined so that supplies are handled only once.

Class I is a scheduled supply based on the supported troop strength and the Army wartime feeding plan. Initially, units in the brigade area eat the MREs in their unit basic loads. These are replenished as soon as supply lines are established. As soon as possible, at the direction of the theater commander, T rations are introduced and then B rations. (The final transition to A rations in the BSA is made only if the theater has matured to the point that refrigerated carriers can be moved forward; the FSB does not have the organic capability to handle A rations.) Regardless of the implementation status of the feeding plan, the brigade commander may decide that the brigade will subsist entirely on MREs during a specific operation.

The supported units do not request rations. Instead, class I flows are based on personnel strength reports. The flow of personnel strength data as it pertains to class I supply is shown in Figure 7-2. The class I supply branch at the DMMC converts personnel strength data to stock numbers and quantities of rations to be pushed to the FSB. These are based on the field feeding ration mix or the tactical commander's instructions. It anticipates the increased use of MREs during an offense or deep operation. The single-item requisitions are sent to the COSCOM MMC. The DMMC branch then prepares and sends a consolidated issue document for each FSB to the MSB. Normally, corps transport assets move rations to the MSB class I point. Class I personnel in the MSB break bulk rations according to the issue documents. The MSB TMT company transports the supplies (along with the issue document and other transportation and shipping documents) to the BSA class I point. In emergencies, when corps transport is overwhelmed, MSB TMT company assets may pick up at corps supply points and deliver to the BSA.

Personnel at the BSA class I point unload the shipment. They inspect it for type, number, and condition before signing for it. At the same time, the shipment is broken down for issue to supported units based on their strength data. Class I personnel prepare copies of the unit issue document.

When supply point distribution is used, supported units use organic transportation to pick up class I supplies. The supported brigade S4 and other supported unit logistics planners, the FSB support operations officer, and the supply company commander coordinate a schedule for pickup of issues. When units arrive to pick up their rations, they check in at a control point. Class I personnel ensure that the unit is an authorized customer and the unit representatives are authorized to draw rations. There are three basic methods of issue:

- *Truck to truck.* Supplies are transferred directly from the MSB TMT vehicle to the supported unit vehicle. This is the preferred method because it saves time, labor, and handling; keeps supplies under cover; and increases mobility. However, it ties up the vehicle from the MSB. Also, unless the arrival of supported unit vehicles is timed perfectly, it could cause traffic congestion.

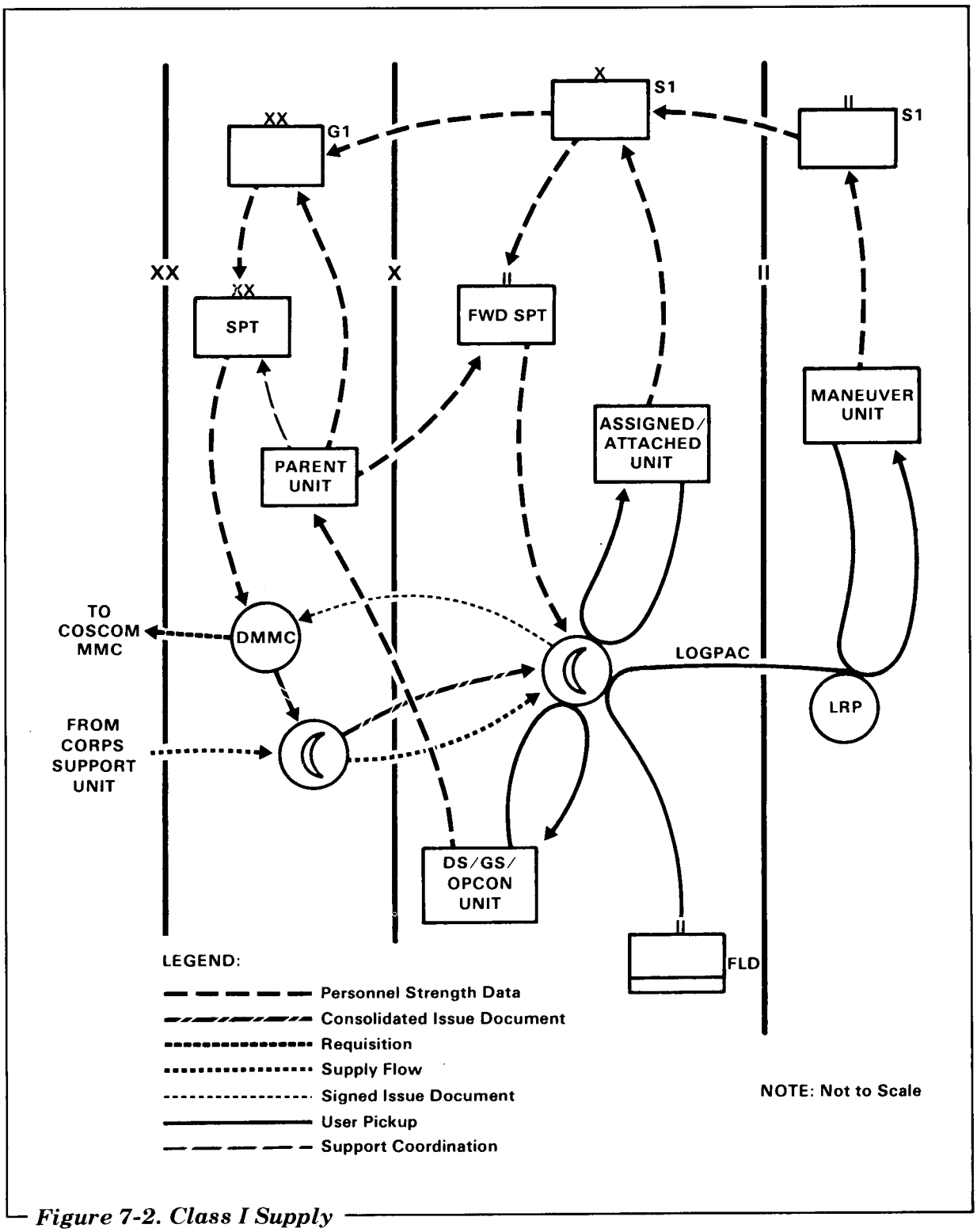


Figure 7-2. Class I Supply

- *Unit pile.* All the items for a supported unit are put in one marked pile on dunnage. The entire pile is put on the supported unit's vehicle when it arrives. This method is the best for control. It is used when class I personnel have time to sort supplies.

- *Item pile.* Like items are put in separate piles on dunnage. As supported units pass each pile, unit personnel load the correct quantity into their vehicle under the supervision of class I personnel. As a result, the supported unit personnel spend more time at the supply point than they would with the other two methods. This method is used when class I personnel do not have the time to sort supplies.

Due to the scarcity of class I point assets, unit distribution is rarely possible in the brigade area. When unit distribution is used, supply section vehicles rendezvous with supported unit vehicles at prearranged grid coordinates.

Signed issue documents are sent to the DMMC along with the transportation and shipping documents used to receive supplies from the MSB. The class I point does not keep copies of issue documents.

CLASS VI

Class VI items are furnished without cost to the soldier through class I channels when units have been operating under combat conditions for more than 15 days without AAFES support or access to civilian markets. In early, highly mobile, or intense conflicts, there is little leisure time and little need for class VI items. Class VI items are therefore restricted to items required for the minimum personal hygiene, comfort, and welfare of the soldier. Initial requirements are filled with bulk class VI supplies. Interim supplies are obtained from AAFES stocks until RSSPs, packaged to meet the requirements of 100 persons for one day, become available. The RSSPs are requisitioned based on personnel strength data. They are issued in the same manner class I supplies are issued. More information on class VI items can be found in AR 30-7 and FM 10-27.

WATER

The FSB supply company has no organic water supply capability. The brigade depends on the MSB S&S company for water purification and distribution. The MSB water section is capable of operating up to five water points. Upon request, the MSB attaches enough water equipment and personnel to the FSB to establish a water point if a water source is available in the vicinity of the BSA.

The water point team purifies and stores potable water. The MSB may attach 3,000-gallon semitrailer-mounted fabric tanks for emergency distribution. The MSB also has forward area water point supply systems to provide additional delivery help when required. The water point is colocated with the FSB's class I point whenever possible. This allows supported units to pick up water and class I supplies at the same time. When a water point moves, it dumps any water it cannot move or issue, and it moves its equipment with assets organic to the water section.

More information on the operation of a water point can be found in FMs 10-52 and 63-21.

CLASSES II, III (PACKAGED), IV, AND VII

Class II

Class 11 supply operations are limited to critical items since clothing and individual equipment are bulky and impede FSB mobility. Many class 11 items are not considered critical and are not normally stocked.

Items that are normally stocked are class II minimum essential combat ASL items. These are based on demand experience and the priorities of the tactical commander. These items normally include high demand mechanics' tools and protective items such as MOPP gear, boots, and helmets. Class II items may be packaged in lots designed to support a specific number of troops to speed receipt and issue. Intense combat and sustained operations in an NBC environment will increase the demand for class 11 items. As soon as tactical intentions are known arrangements should be made for scheduled resupply of required protective overgarments and other class II NBC-related items and equipment.

Soldiers returning to duty from medical facilities in the brigade area may be re-equipped by the supply company or, if appropriate, the gaining unit's support element. If the gaining unit has support elements operating in the vicinity of the medical facility (for example, a field trains in the BSA with the division clearing station), SOP may require the unit to bring required personal equipment when it picks up personnel returning to duty. If the gaining unit does not have elements operating near the division clearing station, medical personnel may be required by SOP to pick up clothing and essential protective gear at the supply point to provide minimum protection before a soldier is returned to duty. The medical facility cannot, however, issue individual weapons.

Packaged Class III

Packaged class III supplies are requested and distributed like class II and IV items. Items include fuel in 5-, 55-, and 500-gallon containers; packaged products such as lubricants, greases, hydraulic fluids; solvents in containers of 55 gallons or less; and cylinders of liquid and compressed gases. To maintain mobility, stockage is restricted to limited high demand items.

In terms of volume, fog oil requirements are likely to be the most significant class III packaged product. Large quantities of fog oil are required for smoke operations. Requirements are affected by the duration of smoke operations, weather conditions, terrain and environment, and time available. Distribution of fog oil from the BSA forward to the smoke generator locations has been a problem in heavy divisions. The smoke platoon has no transportation assets dedicated to resupply of fog oil. The FSB lacks the capability to provide unit distribution. The short-term solution is to use one of the chemical company decontamination squads to transport fog oil. When required, the squad will fill its TPU and load its truck with drums at the class III point to move fog oil. The long-term solution under development is to replace fog oil with diesel with an additive at first and JP-8 later.

The receipt, storage, and issue of packaged petroleum products and fuels are described in FM 10-69.

C1ass IV

Class IV supplies consist of construction and barrier materials. Because of the bulk of these materials and the limited transportation assets and mobility requirements of the FSB, the supply company handles little class IV materiel. It handles no construction materials. Barrier materials (including class V barrier materials) are transported by corps assets as close to the emplacement site as possible. This requires that grid coordinates, unit designations, and POCs be provided by the unit along with the supply request. In addition, the convoy commander must coordinate with receiving unit's field trains before moving to the emplacement site. This ensures the situation and requirement have not changed since the request was made. The

supply company does have the capability to handle limited quantities of survivability items class IV (A). These are items that can be emplaced by any unit. They include such common items as sandbags and concertina wire. Requests for survivability items are processed the same as class 11 items. Requirements for countermobility items (class IV (E)) are consolidated by the brigade engineer and passed to the brigade S4. He passes the requirement to the FSB to enter it in the supply system. These items are controlled through a controlled supply rate for the brigade.

The GS supply company in the corps will prepackage generic barrier packages like the one developed for the LID. (See Table 7-l). These packages can be requested by single NSNs.

Table 7-1. Light Barrier Preconfigured Unit Load (NSN 5660-01-224-8542)

NSN	Nomenclature	Quantity	Unit of Issue
5660-00-251-4482	Barbed Wire	1	Spool
5660-00-921-5516	Barbed Tape	20	Roll
5660-00-270-1587	Post, Fence	54	Each
5660-00-270-1589	Post, Fence	4	Each
8415-00-926-1674	Gloves, Barbed Tape, Wire Handlers	3	Pair
5120-00-926-7117	Mallet, Wooden	1	Each
8430-00-823-7451	Pin, Tent, 12-inch	133	Each

The corps engineer may have packages modified for METT-T. Requirements for these items will be heaviest during preparation for defense. Action should be taken to increase the flow of these materials as soon as the intention to defend is known. Along with other planning factors, detailed planning data on materiel and manpower requirements for countermobility and survivability are given in Chapter 1 of FM 101-10-1/2.

Class VII

Class VII items are often command-controlled because of their cost and importance to combat. The demand for these items depends on the intensity of battle. Replacement is based on combat losses reported through command channels to the division G3 and G4. This permits the commander to remain apprised of the operational status of subordinate commands. He can then direct the distribution of items to tactical units most critical to the success of the mission. Weapon systems, such as tanks, are intensely managed by WSRO. If the item is a WSRO-controlled weapon system, linkup of the item with its crew may occur in the BSA depending on the system and the factors of METT-T. In such cases, the support operations section coordinates with the brigade S1. More information on WSRO is in FMs 63-2-2 and 63-22.

Requests for class VII supplies follow the same flow as class H, packaged III, and IV supplies. Since class VII items are delivered to the FSB on an on-call, marked-for, and ship-to basis, there is no stockage of class VII

items at the FSB. The supply section sends requests to the DMMC. It also maintains a class VII yard. Items which are not throughput to the requesting units are stored or parked there until the units pick them up. Any combat vehicles awaiting pickup are integrated into the BSA defense whenever possible.

Request and Supply Flows

Supported units submit requests for class II, III (packaged), IV, and VII supplies to the supply section. If the supplies are on hand, they are issued (unless the request is for a command-controlled item), and the DMMC is notified of the issues. (If the item is command regulated, approval is required before issue.) Requests for items not on hand are consolidated and sent to the DMMC. The DMMC searches the stock asset records of the MSB S&S company. If the supplies are on hand, the DMMC sends an MRO to the MSB S&S company so the company can issue the supplies to the FSB supply company. The MSB TMT company transports the supplies from the MSB to the FSB supply point. If the supplies are not on hand at the, MSB, the DMMC requisitions the supplies from the COSCOM MMC. If the item is critical and available at another FSB and support priorities warrant, the MMC will notify the support operations branch. The branch will direct cross-leveling from the one FSB to the other. The flow of class II, packaged III, IV, and VII supplies is shown in Figure 7-3.

When items arrive, receiving personnel verify quantities, condition, item description, and markings of items received against shipping documents. Supplies are processed by priority designation. Items coded for a specific unit are put directly into the unit's vehicle using the truck-to-truck method whenever possible or put in a unit pile or parked in the class VII yard until pickup. Remaining items are put in item piles, parked in the class VII yard, or placed into storage in locations assigned by the DMMC or the supply company headquarters based on the established stock locator system.

Supply point distribution is normally used to issue class II, packaged III, IV, and VII supplies to supported units. Unit distribution is used to distribute supplies when the tactical situation permits and transportation assets are available. In some cases, when the tactical situation permits and transload or emplacement sites are near the BSA, ATP MHE maybe used to assist in handling class IV supply. In all cases, signed issue documents are sent to the DMMC along with the transportation and shipping documents.

Additional information on class II, IV, and VII items is in FM 10-27. Information on supply of packaged class III is in FM 10-69.

MAPS

Unclassified maps are stored at the MSB S&S company. The FSB supply section receives maps from the MSB S&S company. It provides supply point distribution to supported units according to established tables of allowances or to fill special requirements. Classified maps are handled through the brigade S2 section. They are not stored at the FSB.

BULK FUELS

Bulk fuels are not formally requested. The S4 of the supported brigade in coordination with the FSB support operations section submits a forecast for bulk fuel requirements of all division units in the brigade area to the DMMC. Forecasts are based on future tactical operations. The FSB petroleum section submits a daily status report on quantities received, issued, and on hand to the DMMC. If METT-T prohibits forecasting, standard prearranged shipments may be sent on a regular basis to the FSB. These would continue until the brigade S4 requests a change.

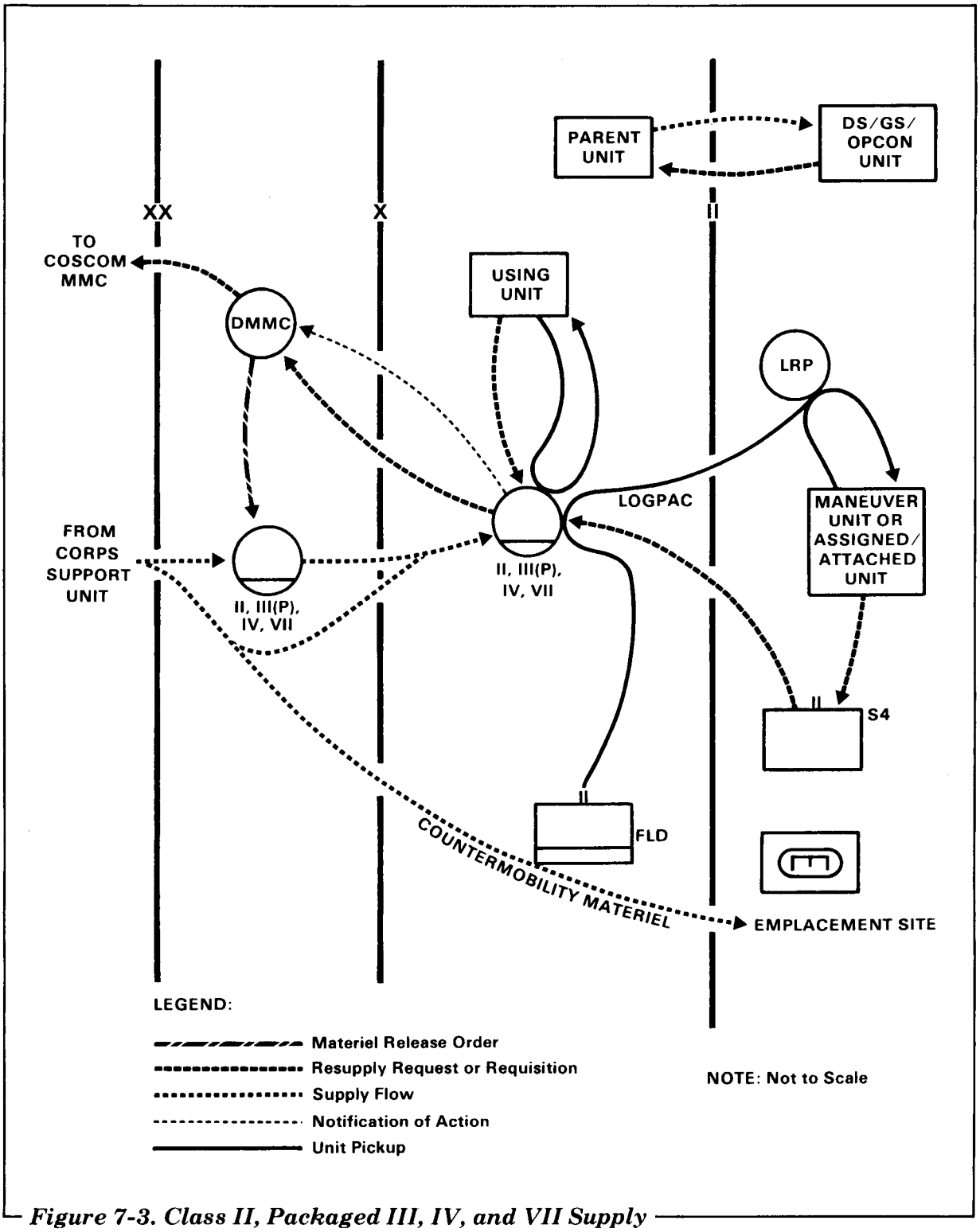


Figure 7-3. Class II, Packaged III, IV, and VII Supply

In any case, the DMMC uses the forecasts and status reports to compute bulk class 111 requirements for the division. The DMMC forwards the requirements to the COSCOM MMC. The COSCOM MMC coordinates the delivery of bulk fuel to the division according to the class 111 distribution plan. The flow of class III bulk fuels is depicted in Figure 7-4.

The FSB receives its bulk fuel directly from the corps and from the MSB. Deliveries are coordinated with the supply company commander through the FSB support operations officer. Upon delivery, the fuel is transferred from the corps or MSB tank semitrailers into the FSB's 5,000-gallon tankers. Fuel transfer operations are described in detail in FM 10-71. Truck tractor drivers may also drop off a full semitrailer at the FSB and pick up an empty one. Such trailer transfers save time but make it harder to keep track of the trailers. Therefore, it is important that schedules are coordinated to ensure empty FSB tankers are on hand when resupply tankers arrive. Receipt documents are signed for the amount and type of fuel received. Quantities received are posted to the stockage record and used to update the daily status report. Receipts are also abstracted daily to the monthly abstract of issues.

Fuel is provided to supported units for the most part using supply point distribution. A schedule for issue of bulk fuel to the division units in the brigade area at the FSB class III point is coordinated between the supported brigade S4, the FSB support operations officer, and the FSB supply company commander. Supported units pick up fuel in their organic refueling vehicles, and authorized unit representatives sign for quantities received. Issue documents are used to provide input to the daily status report. They are abstracted daily to the monthly abstract of issues.

The FSB petroleum section also operates a mobile filling station to provide retail service along the MSR in the BSA. It consists of a cargo truck mounted with a tank-and-pump unit whose two 600-gallon tanks are filled with diesel fuel. The truck tows a trailer with another 600-gallon tank filled with MOGAS. Fuel is dispensed directly to vehicles using the MSR, and local units can fill up their gas cans there. These smaller direct issues are signed for by the receiver on a form used to keep track of daily issues.

The FSB supply company may also move fuel forward to a tactical refueling point to ensure combat vehicles deploy to the battle with full fuel tanks. One technique which has worked in the field involves the use of FSB tankers in combination with maneuver battalion HEMTTs or TPUs. One tanker deploys with two TPUs or HEMTTs to form a refueling module that can service four combat vehicles at a time. Up to six modules can be setup together to service a task-organized company team, if sufficient tankers are available and the tactical situation permits. Refuel sites can be setup on MSRs either in a single site which can service up to 24 vehicles at a time (Figure 7-5) or in a split-site configuration to stagger march elements and reduce traffic congestion. The maneuver battalion, which is familiar with the area, is responsible for site selection and security. The battalion S4 coordinates with the FSB support operations section on where and when the refueling operation will be and how much fuel is required. In some cases, MSB or corps tankers could move to the site to top off the FSB's retail tankers. The primary benefit of this technique is speed. It takes 5 minutes for the FSB tanker driver and assistant driver to deploy one section of a 50-foot hoseline to the T-valve, start the pony engine, and be prepared to pump into the TPUs or HEMTTs. The other advantage of this system is that the FSB can support it with no

155-9910 -94-4

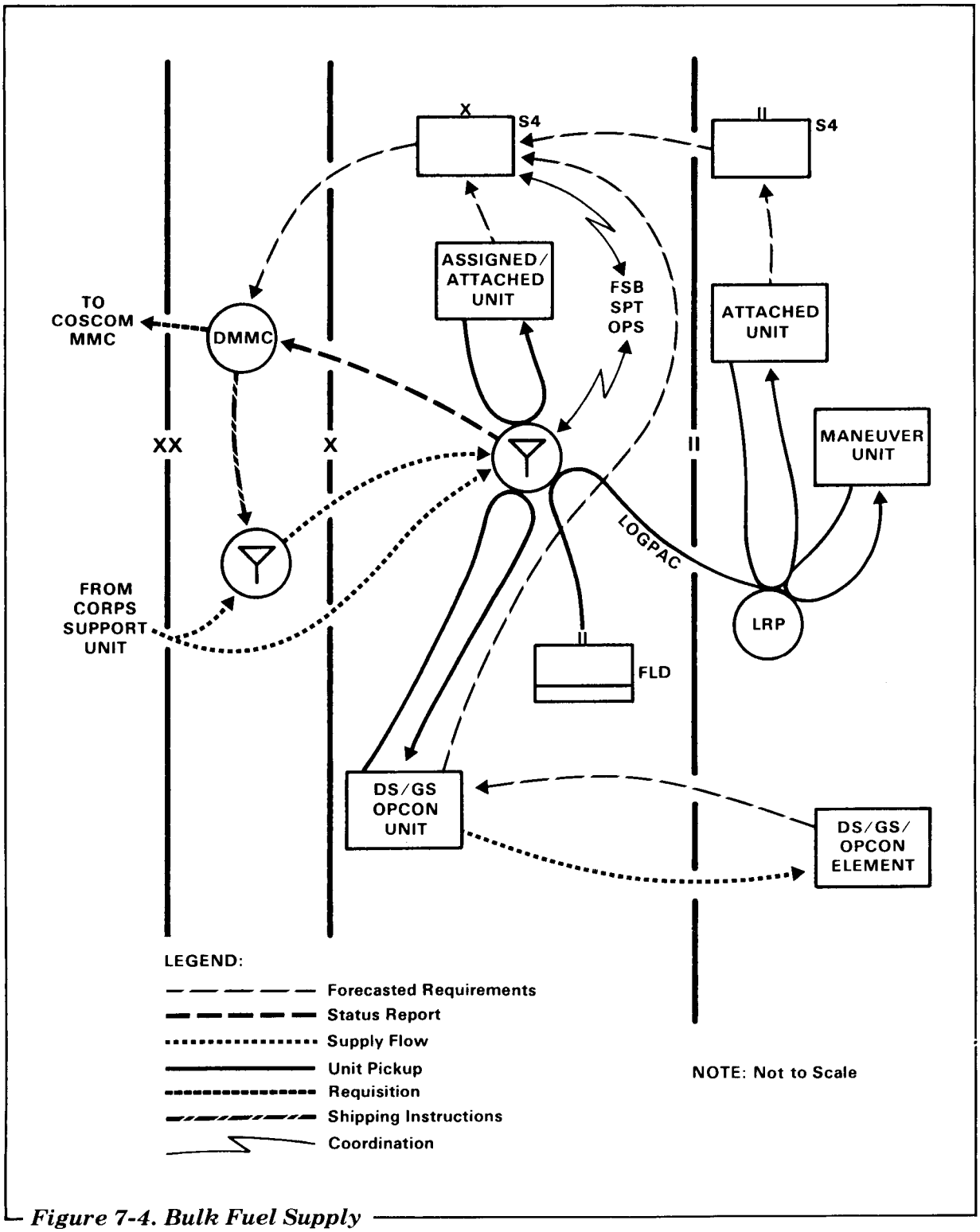
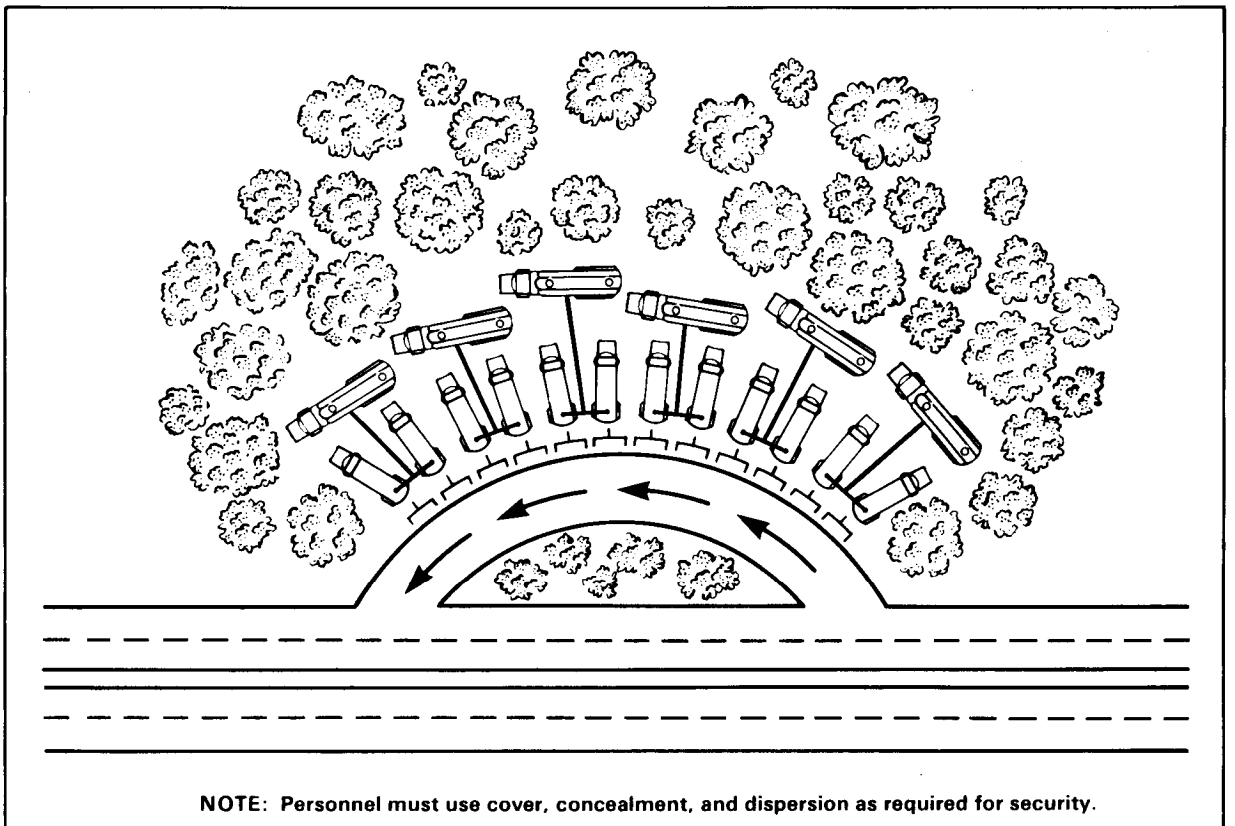


Figure 7-4. Bulk Fuel Supply



NOTE: Personnel must use cover, concealment, and dispersion as required for security.

Figure 7-5. Tactical Refueling Point

additional equipment authorizations. The T-valve, gate-control valve ends, and additional hoses can be obtained through the class IX system. (Note: Future equipment authorizations for the FSB supply company will include refuel-on-the-move equipment which will allow the retail fueling of individual vehicles.)

Due to mobility considerations, the FSB petroleum section has no collapsible fuel tanks. If storage requirements cannot be met with its tankers, a request is made through the DISCOM support operations branch for MSB or, if necessary, corps support. Corps elements may set up, maintain, and issue from bags in the BSA. Such an arrangement is most feasible in the offense. Not only are fuel requirements highest in the offense, but also there is not as much danger that the BSA will have to move quickly rearward, which would be difficult with filled bags on the ground.

Aviation units either in direct support or assigned or attached to the supported brigade are responsible for refueling their own aircraft. Forecasted requirements are developed by the aviation brigade and submitted to the DMMC. When a FARP is to be resupplied from the BSA, the aviation brigade S4, the MSB support operations section and S&S company, and the FSB support operations section and supply company will coordinate the operation. Typically, the MSB S&S company will position its jet fuel assets at the FSB class III point to meet this temporary requirement. (Once JP-8 is available, the MSB will not have designated JP-4 tankers.) The aviation units provide the

personnel, equipment, and initial supply of fuel for the FARP. MSB jet fuel assets located at the BSA class III point may also provide fuel to any aircraft in an emergency or as directed by higher headquarters.

CLASS V

The class V section operates one ATP in the BSA to provide support on an area basis to division and corps units in support of the division as directed by the division commander. Class V is based on a continuous refill system. Each battalion S4 transmits ammunition requirements for organic and attached units through the brigade S4 to the DAO representative at the BSA. Division units not assigned or attached to the brigade will coordinate directly with the DAO representative at the ATP. The DAO ensures that requirements do not exceed the CSR.

As much as possible, ammunition transloaded at the ATP is in combat configured loads. CCLs are predetermined ammunition packs based on mission requirements. CCLs make up 90 to 95 percent of the major user requirements. Requirements are expressed in the type and number of CCLs and any additional single-line items needed. The quantity required of each type of CCL and single-line item requisitions are forwarded by the DAO through the COSCOM MMC to the CSA or the ASP. The CSA reconfigures containerized and breakbulk ammunition into CCLs and ships them via corps ground and air transportation to the ASP and ATP. Non-CCL items are shipped to the ASP.

The ATP receives 75 percent of its ammunition directly from the CSA. CSA shipments to ATPs will primarily be for field artillery and engineer units. Their consumption can usually be predicted far enough in advance to fit the 12-hour or longer ground resupply cycle from CSA to forward ATP. The remaining 25 percent is received from the ASP. Of that 25 percent, approximately 60 percent is in the form of CCLS and 40 percent is single-line items. Resupply from the ASP can be accomplished in 2 to 6 hours by ground and 1 hour or less by air. On their first trip to a newly established ATP, corps drivers unhook and leave loaded semitrailers. When they replenish the ATP, they leave loaded semitrailers and take empty ones back to the corps. The ATP is typically resupplied by corps transportation assets four times a day. The flow of class V supplies to the FSB is depicted in Figure 7-6.

When class V supplies arrive at the ATP, the DAO representative inspects and inventories the shipment. The DAO representative signs for the shipment. He assigns a location in the ATP where the trailer is stationed to await the arrival of the receiving unit. Trailers should be 50 to 100 feet apart depending on the terrain. He ensures a copy of the shipping document is returned to the CSA and that receipt documents are forwarded to the DMMC. If a discrepancy exists on a document, the DAO representative adjusts the document and informs the DAO.

The brigade S4 coordinates with the FSB support operations officer and the supply company commander to establish a schedule for issue of class V supplies. When supported units show up at the ATP, they submit requests for ammunition completed and authenticated by the battalion S4. The DAO representative at the ATP validates all requests before requests are filled. Either ATP MHE or MHE on board supported unit vehicles is used to transload the ammunition from the corps transportation assets to unit vehicles. Signed receipt documents are forwarded to the DMMC. Supported units reorganize or, if necessary, reconfigure the ammunition they pick up at the ATP for further delivery forward to rearm points.

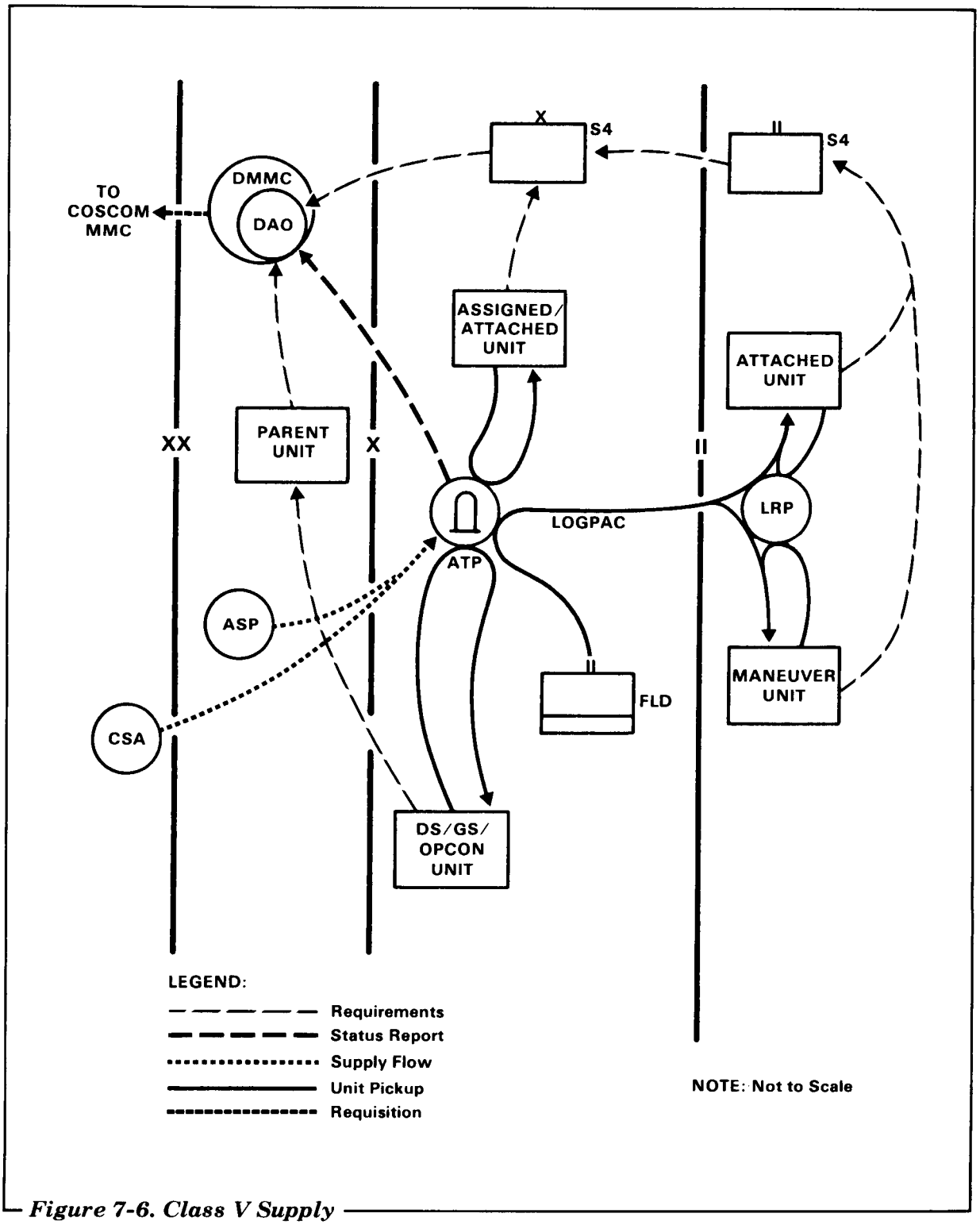


Figure 7-6. Class V Supply

Request time will be reduced through automated systems currently under development. The Standard Army Ammunition System is the automated system for the ammunition node (SAAS 4) and the management system (SAAS 1/3). SAAS 4 is addressed in DA Pamphlet 710-2-2. These systems will enhance responsiveness at echelons above division. Another system, SAAS-DAO, will eventually assist the DAO in management of the division's ammunition. It will provide a predictive ammunition resupply system based on data flows from tactical automated systems, manual reports, and division staff input. FM 9-6 has additional details on class V supply.

AERIAL RESUPPLY

Air resupply missions are categorized as preplanned or emergency. Preplanned missions make up the routine air transport service that is operated in support of preplanned or programmed requirements. Emergency air movements are initiated by requirements that cannot be determined in advance.

The movement control officer coordinates movement of supplies with the MSB and the FSB support operations section. If the movement control officer determines that air resupply is appropriate, he passes a request through the DTO to the G3. The G3 allocates helicopters on the basis of all aviation tasks by balancing combat, CS, and CSS requirements. The G4 must make sure the CSS role for helicopters is developed and considered concurrently with the tactical mission. The priorities for helicopter resupply should be addressed in the OPORD and used by the movement control officer.

Emergency requests are passed through supply channels the same as routine requests. However, they are also passed simultaneously through command channels from the user to the G3. The G3 approves emergency requests and tasks the aviation brigade to perform the mission. At the same time, the G4 coordinates with the DISCOM support operations branch so it can task the appropriate supply activity (the MSB S&S or FSB supply company) to prepare the shipment. A liaison officer from the AB coordinates with the movement control officer and the requesting unit. Prerigged loads of standard resupply packages may reduce response time for emergency air resupply. More details on requests for aerial resupply are in FMs 55-2 and 100-27.

Regardless of whether the mission is preplanned or emergency, if it cannot be performed by division helicopters for any reason, the request goes from the division TOC to the corps TOC. It is also coordinated with the tactical airlift liaison officer.

Selection and control of pickup and landing zones are extremely important. Pickup zone selection and control are the responsibilities of the supported unit, the unit which requests the mission, which may be the FSB supply company. The receiving unit, which is having the cargo delivered to it, is responsible for landing zone selection and control. As a general rule, pickup and landing zones must provide for 30 meters separation between utility aircraft and 40 meters between cargo aircraft. It must have no obstructions such as tree stumps, bushes, or man-made objects that could damage the helicopter rotor systems or the load itself. The number of aircraft that will be using it at one time must be considered along with its use after dark. If night resupply is scheduled, a larger area is normally needed. The surface condition should be solid enough to prevent a helicopter or load from bogging down. Blowing dust, sand, gravel, or loose debris can cause damage to people as well as equipment or aircraft. If the site has a slope of 15 degrees or more, a helicopter cannot land

on it. Also, when carrying an external load, a helicopter cannot rise straight up or come straight down. The avenue of approach and departure should be over the lowest obstacle in the direction of the prevailing winds. Helicopters can operate in a crosswind or tailwind of up to 15 knots.

The supported unit, which is normally the supply company, is also responsible for rigging and loading the cargo at the pickup point. This responsibility includes providing all equipment needed to rig cargo for sling-load operations. (Details on sling-loading are in FM 55-450- 1.) Receiving units are responsible—

- Providing trained ground crews to guide the aircraft in and unload\ derig the load.
- Providing ground security.
- Establishing radio communications with the helicopter and informing the aircrew of enemy activities.
- Marking the loading zone.
- Coordinating with the sending unit for the control and return of the rigging equipment.
- Preparing, coordinating, and inspecting backhaul loads and having them ready for hookup or loading when the aircraft arrives.

FIELD SERVICE OPERATIONS

GRAVES REGISTRATION

All commanders are responsible for unit-level graves registration. It is not provided for the brigade by FSB personnel. The FSB has one GRREG-trained soldier in the headquarters of the supply company. He is available to train brigade personnel in unit graves registration responsibilities in the handling of remains and their personal effects. Unit responsibilities include the initial search, recovery, initial identification, and evacuation of their deceased personnel to the nearest GRREG collection point. This point will normally be in the BSA. Unit GRREG responsibilities are detailed in FM 10-63-1.

The FSB does not include assets designed to operate a GRREG collection point. When the MSB S&S company is augmented with a GRREG platoon, it sends a team to setup a collection point in each BSA. In the initial stages of hostilities before the MSB receives the augmentation platoon, personnel will have to be pulled from other duties to operate a collection point. The decision on whom to pull will be made by the FSB CP and brigade rear CP. The GRREG NCO is norm-ally assigned the duties as chief of the GRREG collection point until the GRREG section arrives. The GRREG point receives remains from supported units, continues the identification process initiated by the unit, and arranges for evacuation to the DSA collection point. GRREG point personnel ensure the personnel recovering the remains have completed a DD Form 567 for each remains. The collection point maintains a record of remains processed.

The section chief requests required supplies through the supply section. Supplies include human remains pouches, personal effects bags, disinfectants, litters, surgical gloves and masks, fingerprint kits, and dental charts.

Once remains are identified to the extent possible and registered, they are evacuated to the DSA point as a backhaul mission by

vehicles bringing supplies (except class I) to the BSA. For morale purposes, remains should always be covered and screened from sight.

All remains found in a contaminated area should be handled as if contaminated. NBC tags should be attached to contaminated remains. If NBC tags are not available, a tag with a large "C" written on it is attached to each contaminated remains. Personnel handling contaminated remains must maintain an adequate level of individual protection. Contaminated remains are kept separate from uncontaminated remains. Due to the possibility of mass fatalities in an NBC attack, normal GRREG methods may not be feasible. Contaminated remains will not be evacuated unless they can be thoroughly decontaminated and checked by NBC personnel. In extreme cases, mass burials may be required. Requests are made through command channels. Permission for mass burials comes from the joint central GRREG officer in the theater after approval from the theater commander.

FMs 10-63 and FM 10-63-1 contain more information on graves registration operations. Details on the MSB's grave registration platoon is in FM 42-7.

SALVAGE

The supply section of the FSB supply company also operates the brigade salvage collection point. It is often located near the maintenance collection point. It receives all salvage materiel for which maintenance units do not have maintenance responsibility except for toxic agents, radioactive materials, aircraft, ammunition and explosives, COMSEC, and medical supplies.

Units in the brigade sector are responsible for bringing salvage materiel to the salvage point. When the salvage point receives materiel, it ensures the item and condition on the turn-in document are accurate. Technical publications may be used to identify items if available. Salvage personnel classify items as serviceable or unserviceable. If they cannot determine an item's identity or serviceability, maintenance personnel may perform a technical inspection. Items are segregated in the holding area as serviceable, reparable, or scrap. Serviceable items are protected from the elements as much as possible.

The DMMC should ensure general guidance on disposition has been issued. The salvage point, in turn, reports on the status of items to the DMMC. Foreign or captured materials are reported to the FSB S2/S3 for disposition instructions.

Normally, reparable items are sent to the maintenance base shop and serviceable clothing and canvas items to the laundry and renovation platoon of the COSCOM. Unrepairable items and scrap are evacuated through salvage channels to a property disposal unit.

CLOTHING EXCHANGE AND BATH

Clothing exchange and bath service is provided on an area basis throughout the division by the MSB S&S company when it is augmented with a CEB platoon. The platoon includes three sections, each of which can operate a CEB point. The location of the three points depends on METT-T. If circumstances permit, a point may be moved as far forward as a BSA.

CEB points provide showers from portable bath units, delousing service, and exchange of soiled clothing for laundered clothing. CEB operations are also integral to decontamination. The FSB support operations section coordinates with the supported brigade S4 to schedule CEB. As a planning

factor, CEB operations should be scheduled for once each week. Supported units coordinate with the brigade S4 for CEB and provide soldiers to guard valuables and assist with clothing exchange. More information on clothing exchange and bath operations can be found in FM 10-280. Information on the MSB's CEB platoon is in FM 63-21.

CONSIDERATIONS FOR VARYING TACTICAL SITUATIONS

OFFENSE

The supply goal of the FSB preparing for an offensive operation is to ensure brigade elements begin with their basic loads of all classes of supplies to sustain the attack. It is equally important to have the FSB elements topped off and positioned far enough forward to enable them to quickly resupply the brigade once basic loads are depleted. The two most critical supply categories will be class III and V. In cases where full loads are not expected to be sufficient to sustain the battle, the supply company commander, with the support operations officer, may coordinate for additional stockage at predesignated areas. POL stockage points will require MSB or corps assets. FSB elements must remain prepared to move quickly as the brigade moves forward.

Predetermined emergency resupply packages of ammunition, POL, and in arid and tropical environments, water may be developed by the FSB in coordination with the brigade and task force S4s. Emergency procedures should also be identified in advance. These may involve the supply company automatically requisitioning emergency packages or the supported elements using radios to request them. Emergency aerial resupply should be used whenever possible in these conditions.

Frequent movement will be critical in the offense. Supply assets must be prepared to move with the brigade. Supported elements do not have the assets to travel extensive distances to the rear to pick up supplies. Careful coordination will be required to minimize the stress on MSB and corps assets caused by these frequently moving forward supply points.

As mentioned in Chapter 2, other supply considerations in the offense are reliance on MREs, use of captured and found supplies, and increased requirements for obstacle-breaching and bridging materiel.

DEFENSE

Stockpiling of supplies may be required in defensive operations. Successive defensive positions should be coordinated with brigade planners. These positions will be used to stockpile critical supplies. Plans should be made to destroy stockpiles if necessary. Though class 111 usage may be lower than during an attack (depending on the nature of the defense), class V use is likely to be higher, especially in the static defense. In a static defense, requirements for barrier materials will also be high in the preparation stage.

RETROGRADE

Supply company elements begin to move to the rear before combat units. This minimizes interference with maneuver. It also allows them to set up supply points along the route of withdrawal. Noncritical items will be identified by the supply company along with the support operations section. These may include class I, II, IV, VI, and VII items. Any forward stocks of these items should be withdrawn immediately. Replenishments of these items should not be delivered forward. Supplies (except class VIII) which cannot be evacuated should be destroyed.